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THE LONG-WAISTED WOMAN AND HER MOVABLE KIDNEY.*

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NEW YORK.

IN 1902, the writer after carefully studying several hundred cases of splanchnoptosia, in a clinical lecture before the New York School of Clinical Medicine,¹ gave expression to the "developmental theory" of that disorder in the following terms: "At puberty, when the girl is rapidly increasing in stature, and her menses begin to drain the system, relentless custom adds to the enormous strain by interdicting skipping, running, and jumping. Healthful exercise may no longer be indulged in; she must be compressed within a corset; her clothing no longer suspended from the shoulders, but hung from the waist by tightly drawn bands, and the light, short skirts are exchanged for long, heavy, trailing dresses; yet we wonder that the health of the young girl breaks down when thus hampered, haltered, and harnessed. Ere long the plump, rosy-cheeked, vivacious girl becomes the sedate miss—anemic, dyspeptic, constipated, nervous, restless, sleepless; and her parents wonder why, fearing that the heretofore lovely girl is about to be carried off by consumption."

This change we believe to be brought about in

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the following way: "As the spinal column at this age rapidly lengthens it should carry upward all the viscera attached thereto, but owing to the weight of clothing and compression at the waist-line this process cannot take place; stretching of the ligaments occur, the viscera are prevented from rising, and hang at a level much below normal."

Whenever a patient in this class applies for relief we notice that she is slender, with undersized hips, her clothing fails to hide the almost masculine figure, and lacking the graceful curves of a well nourished woman.

When rehearsing her history, she does so in a sing-song fashion, with the glibness of an oft-repeated tale; involving disorder of the stomach and intestines, irregular pains, headache, lassitude, loss of flesh and strength, inability to attend to her duties or pleasures, and, most characteristic of all, inability to tighten her clothing and corsets or to wear any corsets at all.

For the purposes of this paper we have reviewed fifty cases, and careful measurements of these patients constantly show definite abnormality in one or more of the following respects: (1) The length of the trunk, as shown by the distance between the suprasternal notch and the upper border of the symphysis pubic, varies from 19 to 23 inches, regardless of the individual height, which ranges from 5 feet 1 inch to 5 feet 11 inches, approximately 26 per cent. of the subjects measuring 19 and 20 inches, and 23 per cent. 21 and 22 inches. But one girl 5 feet 3 inches in height measured 18½ inches, and another 4 feet 10 inches measured 18 inches between the same points, and a weight of only 90 pounds. (2) A deviation from the normal relation between the circumference of the waist and the hips over the

great trochanters, of from 2 to 12 inches, and averaging a loss of flesh of 5 pounds to the inch, or from 10 to 60 pounds underweight. These factors are so constantly present that those who come in contact with large numbers of this class of patients learn to recognize them at a glance, and make the diagnosis at sight.

Inspection of the abdominal wall shows a characteristic configuration. A hollowing of the epi-

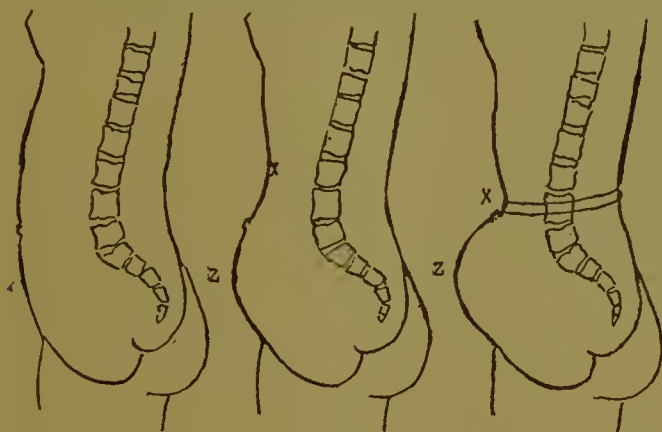


FIG. 1.

FIG. 2.

FIG. 3.

FIG. 1. Contour of the anterior abdominal wall (normal); FIG. 2. Lead-tape outline, standing without clothes, visceral ptoses; FIG. 3. Same patient, with waistband tied; X shows point of greatest hollowing; Z point of greatest protrusion.

gastrium (Fig. 2x), and a bulging of the hypogastrium (Fig. 2z), the whole resembling an inverted interrogation mark. In thin walled individuals, a respiratory rise and fall of the greater curvature of the stomach can be distinctly seen.

In order to determine the real relation of the viscera, and show the excessive distortion when the woman has her garments on, it is our custom, when examining, to tie a piece of bandage around the waist just as tightly as the woman makes her waistbands, with the result shown in figure 3.

Careful measurement with a lead tape, from one anterior superior spine to the other shows (Fig. 4) the—

ABDOMINAL PROJECTION.									
Inches.....	0	1	1½	2	2½	3	3½	4	5
Cases.....	3	3	10	6	5	5	5	4	1

with eight of the fifty cases unrecorded.

The location of the Greater Curvature of the Stomach was

Above the umbilicus.....	1 inch	3 cases
Above the umbilicus.....	2 "	1 "
At the umbilicus.....	.....	5 cases
Below the umbilicus.....	1 "	.....
Below the umbilicus.....	1½ "	1 "
Below the umbilicus.....	2 "	2 "
Below the umbilicus.....	2½ "	1 "
Below the umbilicus.....	3 "	5 "
Below the umbilicus.....	3½ "	3 "
Below the umbilicus.....	4 "	2 "
Below the umbilicus.....	4½ "	2 "
Below the umbilicus.....	5 "	1 "
In right iliac fossa.....	.....	1 "
Just above symphysis.....	.....	2 "
On symphysis.....	.....	11 "
Dips into pelvis.....	.....	1 "
Total	38 cases	4 cases
		42 cases

The Lesser Curvature was Palpable Below the Ensiform

Inches.....	¾	1	1½	2	2½	3	3½
Cases.....	1	2	1	5	1	1	1

all associated with more or less gastric dilatation.

The four cases with the greater curvature of the stomach *above* the umbilicus were considered in normal position, and the remaining 38, or about 90 per cent., as displaced. The 12 cases in which the lesser curvature was palpable (30 per cent.) were designated prolapsed stomach, as compared with the other 26 cases (60 per cent.) showing some degree of dilatation of the stomach.

Succussion, or the splashing sound, was more or less well marked in 7 cases, and was not difficult to elicit when there was fluid in the stomach, sometimes when the patient was lying down, in others when standing.

The appendix had been removed in 2 instances;

was palpable in 12 cases, of which 1 was normal, 3 tender to touch, 1 behind the caput coli, 2 had had recurrent attacks, and in 13 that organ could not be defined.

Cancer of the pylorus was made out in one case, referred to Roosevelt Hospital; the pylorus was removed by the surgeon in charge, and the patient died a few days later.

The left kidney was prolapsed in but *one case*, the right kidney in 34 instances, the *lower pole being below the chondral border*.

Inches.	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8
Cases.	1	2	2	4	5	10	2	4	1	2	2	1	1

In nine patients neither kidney was palpable, and no record in five. In one case the right kidney had been removed some years before, showing a total of 80 per cent. in which the kidney was involved. The kidney was replacable by posture and manipulation in thirty-one instances, partially so in one, and adherent in three.

Transillumination of the stomach was practised but three times in this series of cases, as it can do little more than confirm what the practised eye, ear, and hand had already determined.

The history of splanchnoptosis usually dates from puberty, occasionally follows trauma, is very common in parous women, and in those who have had large abdominal tumors removed. The rapid loss of a large amount of flesh during severe illness is often followed by prolapse of one or more of the abdominal viscera. The various phases are best shown by the following illustrative cases.

CASE I.—Dislocated right kidney in a child, simulating appendicitis. H. G., Jr., aged 10 years, granddaughter of Dr. J. J. B., Exeter, N. H., seen in consultation December 3, 1905. Four days before, illness began with vomiting and pain located

in the right iliac fossa, without distention, or abdominal rigidity. Temperature had ranged from 97.8° to 98.4° F., pulse 100 to 120. Calomel was given for constipation, and she vomited everything taken by mouth, stools very small. Examination shows abdominal wall lax, intestines empty, stomach contracted; some soreness in the epigastrium, and tenderness on the inner side of McBurney point. Right kidney prolapsed two-thirds of its length; tender on pressure, easily re-



FIG. 4.—Abdominal projection; lead-tape outline between anterior superior spines; curved line, when standing; flat line when lying on back.

placeable. Treatment: The child was placed flat on her back, the foot of the bed elevated eight inches, and a snugly fitting abdominal binder applied. Measurements were taken for a special corset, which was put on two weeks later. She has worn this same style of corset ever since, and has not suffered since the kidney was replaced on the day of examination.

Nephroptosis of traumatic origin occurred twice in this series: CASE II.—Dislocation of the right kidney with hematuria, from a fall. Mrs. H. F. M., wife of a Toronto physician, who, recognizing the source of the lumbar pain, placed her in bed, and wrote for one of my corsets, which was put on December 27, 1903. April 5, 1905, the doctor wrote me, "My wife's corset, after the stiffness wore off, has been quite comfortable. A few weeks ago she got a second one. The range of

mobility of the kidney in the anterior axillary line cannot be more than an inch and a half or two inches at the most, and is more painful. A false step occasionally causes a dull ache in the loin, which usually passes off in a few moments, especially if she is able to lie down." This pain was due to the fact that the corset was not laced tightly enough at the waist to immobilize the kidney and was easily remedied.

CASE III.—Miss L. M. R., sent to me by Dr. C. E. Shaw, of Hoosick Falls, N. Y. On October 18, 1906, she said that about a year ago, after tobogganing, there was swelling and pain in the right loin, which passed away in a few hours, but there has been more or less of the same discomfort ever since. Examination shows a well formed woman, of 23 years, 5 feet 8 inches in height, weighing 138½ pounds; waist measuring 26 inches, hips 39 inches (good proportions), supra-sternal notch to symphysis, 20½ inches. The right kidney descends 2 inches, is replaceable; the greater curvature of the stomach lies just above the umbilicus. Abdominal projection 1½ inches. November 26, 1906, she complained that, while the corset gave relief, it would slip up when she sat down. Lacing more tightly at the waist overcame this difficulty, and she was relieved of all her symptoms, except an overanxious mother.

The stretching of the abdominal wall during pregnancy and the rapid emptying of the uterus during labor leaves the abdominal wall very lax, the ideal condition for the production of visceral ptoses, which will certainly follow if we fail to apply a snug abdominal binder, with exercises while the patient is in bed, and provide for abdominal support when the patient gets about.² I have already reported several cases of acute jaundice during the puerperium caused by traction of

a prolapsed kidney on the common bile duct, promptly relieved by elevating the foot of the bed, and cured by a properly fitting corset.³

Hydronephrosis, due to kinking of the ureter, is the most common result of kidney prolapse, manifested by the syndrome known as Dietl's

SYMPTOMATOLOGY: KIDNEY VS. THE GASTROINTESTINAL TRACT

	Kidney Group	Gastrointestinal Group
Onset.....	Acute attacks, intermittent from day to day, Dietl's crises more or less constant.	Chronic.
Pain.....	Abdominal, hypochondriac, through to back, down loin, very intense in a few hours.	Epigastric, cardiac, to left shoulder and arm, after eating.
Abdomen.....	Distended on same side..	Bloating.
Stomach.....	Nausea, vomiting, even when empty.	Regurgitation of gas, water-brash.
Bowels.....	Constipation-diarrhea, stools dark or clay color.	Seldom move without drugs, catarrhal colitis.
Urine.....	Scanty, dark, acid, with or without pus or albumin.	Usually frequent, small quantity, often dysuria.
Pulse.....	Small, rapid, high tension.	Small, rapid, low tension.
Corset and clothing	Must be loosened at once.	Must be worn loosely all the time.
Associated with...	Hydronephrosis, jaundice, or hematuria.	Autointoxication, malnutrition, loss of flesh and strength, headache, sleeplessness, nervousness, physical and mental malaise, uncertain temper, etc.
Response to treatment.	Early relief when placed in the inclined dorsal posture. Return of attack when resumes the upright posture.	All the usual remedies, bandages, and belts fail to afford permanent relief.

crises—sudden attacks of nausea, vomiting, pain, tenderness, and swelling along the right loin, sometimes to enormous proportions; which quickly subside when the patient is placed in bed with the foot raised 8 or 10 inches.

Referring to the table on symptomatology we note the striking difference between the clinical manifestations arising from the movable kidney

which bobs up and down with every change of posture, and the doleful picture of the "hell on earth" experienced by those who suffer from gastrointestinal displacement, distortion, and disease, without any permanent relief from the ordinary methods of treatment—medicinal, mechanical, or surgical. This condition was present in varying degrees in all but three of the fifty cases, and was demonstrated to be due to dilatation of the stomach, prolapse of the stomach, or both, associated with dislocation of the colon, especially in its transverse portion; with consequent retention of food and feces, and autointoxication.

In 1893, the writer began using ready-made corset for the immobilization of mobile kidneys, and on April 18, 1901, before the College of Physicians, Philadelphia, gave the first description of the style and mode of application of a custom-made corset for this purpose.⁴

The new features brought into play by the writer's method involves (1) the replacement of the prolapsed viscera in the semiopisthotonos posture (Fig. 5); and (2) suprapubic support of the replaced organs by the wearing of a specially constructed corset,⁵ made from measurements, taken by the physician, while the patient is lying on her back. Briefly, this garment is a simple modification of an ordinary corset, which reaches low down over the hips, and to the symphysis in front, of fashionable design, gracefully curving in at the waist and out over the hips (padded inside for women with small hips). The front section is made V-shaped, narrow at the symphysis, broadening out toward the top, to provide ample room in the epigastrium for the replaced stomach.

When about to put the corset on, the patient loosens the lower lace (laced from the waistline down), the upper one being of thin hat elastic,

wraps the corset around her waist, lies down upon her bed or a couch, raises her hips as in figure 5, rubs and strokes the stomach upwards toward the diaphragm, fastens the hooks from the lowest one up, and draws in the lower lace as tightly as possible, without lowering the hips until the lacing has been accomplished. No belts or buckles, straps, or airpads, except the ordinary garters, are required, and are only found on garments made by those who fail to grasp and apply the principles involved.

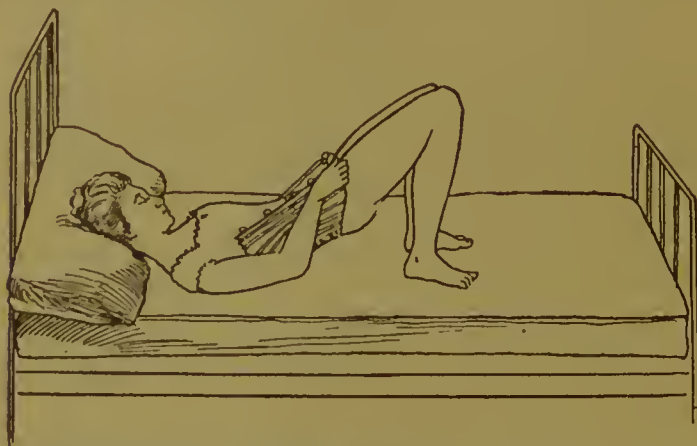


FIG. 5.—Semiopisthotonos posture; hips raised, causing the viscera to gravitate toward the diaphragm, when fastening the corset, for the support of the organs replaced.

Before recommending a corset for splanchnoptosis it is necessary to determine: (a) Is the kidney replaceable, or safely fixed in the false pelvis, where it cannot be injured or compressed by the waistband? (b) Does the lower border of the stomach rise to or above the umbilicus when the patient is in the semiopisthotonos posture? The importance of this question was shown in Case 4, where it was necessary to open the abdomen and

release the stomach from its attachment to the sigmoid flexure of the colon, caused by appendical peritonitis. Immediately after the adhesions were loosened the patient vomited, the stomach contracted, and with the wearing of a corset it never sank lower than the umbilicus. This class of cases is fairly frequent, and demands operation before adjusting the corset.

CASE V.—This is an example of an unfortunately frequent and disagreeable result which has followed the epidemic of surgical enthusiasm for kidney fixation. The woman wore a ready-made corset with partial relief from October, 1901, to 1904. Her right kidney was then sutured by Dr. Goelet, August 29, 1904. The kidney had dropped three and one-half inches, November 25, 1904, and I fitted her with a corset. When last seen, April 9, 1905, she had been much relieved, was able to take long walks, but experienced soreness at the umbilicus, due to want of room in the upper part of the corset.

Three cases required the removal of fibroids, one of the appendix, one ectopic pregnancy, one ovarian hematoma before putting on the corset; while, on the other hand, the corset gave relief, most extraordinary, from suffering following ventrofixation; also in postoperative ventral hernia of large size, and resulted in saving both women from the necessity of secondary operations.

Prof. J. C. Da Costa, writing on "A Modified Operation for Movable Kidney,"⁸ says: "In many cases of movable kidney, I believe that it is unwise to operate at all, the use of a properly applied corset being relied on to keep the patient comfortable and safe. The corset devised by Dr. Gallant accomplishes this purpose more successfully than any one of the so-called kidney supports." This substantiates my original claim that

95 per cent. of movable kidneys can be handled better without operation.

Results.—From the fact that thirty-two of these patients were sent to me by twenty-seven physicians, residing in nearly as many States and countries of North America, it is impossible to tabulate the actual results of this plan of treatment; but it can be honestly stated, and without exaggeration, that whenever a corset has been properly fitted and put on after this plan the woman at once realizes a sense of comfort and support to which she has heretofore been a stranger, with cessation of the so-called attacks. As time goes by her friends notice a well marked improvement in her general health, in temperament, in appearance, in weight, in ability to walk, work, sleep, eat, and enjoy the good things of life.

To me, personally, the most flattering evidence of the usefulness of this method of treating Glenard's disease has been the numerous attempts at improving the style of corset, by encumbering it with all sorts of "contraptions"; and its adoption by the editors of a well-known Genitourinary Surgery, who forgot to make mention of the paternity of the child. "Imitation is the sincerest flattery"—*Colton*.

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